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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,208	12/08/2004	David Charles Fletcher Gladman	66307-328-7	4353

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EXAMINER

PALENIK, JEFFREY T

ART UNIT	PAPER NUMBER
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1615

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,208	Applicant(s) GLADMAN ET AL.	
	Examiner Jeffrey T. Palenik	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>23 Aug 2005 and 2 Oct 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

The Examiner thanks the Applicants for their timely reply filed on 12 December 2007, in the matter of 10/517,208.

Applicants' election with traverse of Group I, claims 1-6 is acknowledged. The traversal is on the grounds that the cited patent by Wheeler (U.S. 6,312,760) "does not disclose discrete powders" and that "only large, continuous phases of a composition which contain a biliquid foam" are disclosed. Applicants' arguments have been fully considered and were found to be persuasive with regards to Wheeler.

However, Examiner maintains the argument that no special technical feature exists since Macaulay (U.S. Patent 3,016,308) teaches a process for making a substantially dry free-flowing powder of microscopic discrete capsules which possess a shell or wall containing therein a marking fluid (col. 1, lines 10-20). Said microscopic capsules are taught to contain an emulsion (col. 4, lines 35-55).

Therefore, the restriction requirement is still deemed proper and is therefore made FINAL.

Claims 7-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (lack of unity) requirement between the product and method of manufacturing.

The remaining claims 1-6 are presented and represent all claims under consideration.

Priority

This application is the National Stage filing of International Patent Application No. PCT/GB03/02713, filed 24 June 2003, and British Foreign Application 0214793.2, filed 26 June 2002. Examiner finds that Applicant's filing meets the priority requirements for the International Application, but not the Foreign Application.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Acknowledgment is made of Applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Germany on 3 August 2002 (see Application Data Sheet). A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

As such it is determined that the earliest effective U.S. filing date to be 24 June 2003.

Information Disclosure Statement

Two Information Disclosure Statements filed 23 August 2005, and 2 October 2006 are acknowledged and have been reviewed.

Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

The abstract of the disclosure is objected to because it is directed toward non-elected subject matter. Correction is required. See MPEP § 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 4 is objected to because of the following informalities: the recitation “methyicelluloss” in claim 4 is viewed as a misspelled word. Examiner interprets this term, herein, for the purposes of examination to be “methylcellulose”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claim 1 is vague and indefinite because it lacks clarity. It is not immediately clear how the powder, the biliquid foam and the matrix of polymer material components relate to one another within the overall composition. The Examiner interprets the broadest reasonable definition of the claim language to read as a polymer-encapsulated, biliquid foam.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiestand et al. (U.S. Patent 3,549,555).

The instant claims are directed towards a powder comprised of a polymeric matrix material which further comprises an entrapped biliquid foam. Claim 2 further limits the powder composition to one that is dried by spraying, freezing or granulating in a fluidized bed. Claim 4 further limits the encapsulating polymeric material of the powder composition and claim 5 further limits the composition of the biliquid foam. The dependent claim 6 further limits the biliquid foam emulsion component of the composition such that its representative weight ranges from 5% to 50% of the composition.

Such compositions are taught by Hiestand. Claim 1 teaches a lipophilic-liquid-in-hydrophilic-liquid emulsion wherein the particles are coated with a coacervate and then hardened. Spray-drying and freeze-drying are both taught (col. 7, lines 18-23). Examples 3 and 4 also teach specifically teach spray-drying of the encapsulated material (col. 7, line 70 to col. 8, line 25). Example 4 further teaches the use of carboxymethylcellulose (CMC) as a thickener, the use of gelatin as the coacervating colloid, and the use of lanolin as the oil phase in the emulsion. Example 3 teaches the use of mineral oil in the emulsion. The example cites the following formulation:

Volume	Ingredient(s)
33 mL	Mineral oil
25 mL	Water (containing 2 gm magnesium aluminum silicate and 0.5 gm alizarin cyanide green
125 mL	Gelatin sol (12.5 gm gelatin + 125 mL water)
125 mL	20% sodium sulfate solution containing 37 gm acacia
12.5 mL	37% formaldehyde solution
320.5 mL	Total volume

Mineral is taught as comprising about 10.3% by weight of the oil based on the weight of the composition.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiestand (U.S. Patent 3,549,555) in view of Macaulay (U.S. Patent 3,016,308)

The instant claims are directed towards a powder comprised of a polymeric matrix material which further comprises an entrapped biliquid foam or emulsion, as described above. The dependent claim 3 further limits the powder composition by its particle size, citing a range from 5 to 150 microns.

Such compositions are taught by Hiestand et al., as described above. The size of the particles (e.g. emulsion capsules) is taught to be dependent, in part, on a multitude of variables such as degree of dispersion, size of the emulsion particles of the primary emulsion and the thickness of the coacervate applied (col. 6, lines 43-54). Thus the

particle thickness is governed by the ingredients used. However, Hiestand et al. does not set forth a specific target range for particle size, such as the range of the instant claim 3.

Macaulay teaches a free-flowing powder of microscopic discrete emulsion capsules (claim 11) contained by a polymeric film (col. 5, lines 43-50 and 65). Claim 11 further teaches that the resulting powder capsules will have a diameter ranging between about 0.1 to 70 microns. Claim 12 teaches a preferred diameter limitation ranging from about 1 and 20 microns.

The references do not teach the particular particle size range claimed by Applicant. The particle size of a composition is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of such parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ and reasonably would expect success. It would have been customary for an artisan of ordinary skill to determine the optimal particle size (e.g. diameter) of the resulting powder capsules in order to best achieve the desired results of the instant invention. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of particle size and ingredient amounts would have been obvious at the time of Applicant's invention.

No claims allowed.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey T. Palenik whose telephone number is (571) 270-1966. The examiner can normally be reached on 7:30 am - 5:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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